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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,494	10/24/2003	Chun-Hung Kuo	MR3003-61	7224
4586	7590	04/07/2005	EXAMINER	
ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043			CLARKE, SARA SACHIE	
ART UNIT	PAPER NUMBER			3749

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/691,494	KUO ET AL.
	Examiner	Art Unit
	Sara Clarke	3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1-15 and 17 is/are rejected.
- 7) Claim(s) 16 and 18 is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: ____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

The abstract of the disclosure is objected to because it is longer than 150 words. Correction is required. See MPEP § 608.01(b) and 37 CFR 1.72(b).

Claim Objections

Claims 13-18 are objected to because of the following informalities: In claim 13, line 8, "resulted from" should be "resulting from." Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 11, it is unclear what characteristics make a solvent a "common" solvent.

The specification provides no guidance as to the meaning of this term.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and

Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 11 recites the broad recitation "common solvent," and the claim also recites "n-hexane" which is the narrower statement of the range/limitation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 5, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (JP 56-59103).

Matsumoto et al. discloses the invention substantially as claimed with the exception of the vaporization tank 2 not being specifically a cylinder.

It has been held that a change in shape, absent persuasive evidence that the particular configuration was significant, was a matter of choice, which a person of ordinary skill in the art would have found obvious. See In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). In the present case, the tank 2 of Matsumoto et al. has a

shape. To have modified it so that is a cylinder would have been obvious to one of ordinary skill in the art at the time of applicant's invention since applicant has provided no evidence that a cylindrical shape is significant.

Regarding claim 4, Fig. 1 of Matsumoto et al. shows an electric fan symbolically. As an electric fan, in order to operate, one of ordinary skill in the art would have recognized that it necessarily includes a motor.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (JP 56-59103) as applied to claim 4 above, and further in view of Kun-Ming (US 4106914).

Matsumoto et al. discloses the invention substantially as claimed with the exception of a pressure-controlling switch.

Kun-Ming discloses a vaporization tank and teaches the use of switch 31, which stopping the operation of the air compressor 2 if the pressure inside the tank increases. See column 3.

Thus, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to provide the device of Matsumoto et al. with the switch taught by Kun-Ming for the purpose of stopping the fanning means if the pressure in the tank increases.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (JP 56-59103) as applied to claim 4 above, and further in view of Kunze (US 5370829).

Matsumoto et al. discloses the invention substantially as claimed with the exception of a battery for powering the fan motor.

Kunze discloses an induced-air vaporizing device and teaches the use of battery 18 for powering the motor.

Thus, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to provide the device of Matsumoto et al. with a battery as taught by Kunze for the purpose of powering the fan motor.

Claims 1, 2, 4, 5, 7, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barbarin (US 82273) in view of Kun-Ming (US 4106914).

Barbarin discloses the invention substantially as claimed with the exception of a constant temperature means and fanning means.

Kun-Ming discloses a vaporization tank and teaches the use of a constant temperature means 5 for the purpose of facilitating vaporization of the liquid fuel. See column 3. Kun-Ming further teaches the use of fanning means 2 for the purpose of providing compressed air to the tank.

Thus, it would have been obvious to one of ordinary skill in the art at the time of invention to provide the vaporization tank of Barbarin with constant temperature means and fanning means as taught by Kun-Ming for the purpose of facilitating vaporization of the liquid fuel by providing heat and compressed air.

Claims 13-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (JP 56-59103) as applied to claim 1 above, and further in view of Ashton et al. (US 6422232).

Matsumoto et al. discloses the invention substantially as claimed with the exception of a supporting stand, a meshed cover, a bracket, and a reflecting cover.

Ashton et al. would have readily commended itself to the attention of one of

ordinary skill in the art and is thus analogous prior art because it teaches the use of a gas appliance (a heater) used with a source of gas stored in a tank 20. Ashton et al. discloses a supporting stand, which includes support pole 6 and the element shown in Fig. 1 embracing the valve knobs; a burner head 118; and a meshed cover 120 for providing radiant heat outdoors. Ashton et al. further teaches the use of a bracket 122 for supporting the cover 120 and a reflecting cover 300 for reflecting some of the heat downwardly and outwardly.

Thus, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to provide the device of Matsumoto et al. with the supporting stand, a meshed cover, a bracket, and a reflecting cover as taught by Ashton et al. for the purpose of providing radiant heat outdoors.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-12 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 21-32 of

copending Application No. 10/691,493 in view of Lagreid et al. (US 3140740). This is a provisional obviousness-type double patenting rejection.

Claims 21-32 of application 10/691,493 recite all of the claim elements of claims 1-12 of the present application with the exception of the positive recitation of a warming burner.

Lagreid et al. would have readily commended itself to the attention of one of ordinary skill in the art and is thus analogous prior art because it teaches the use of a gas appliance S used with a source of gas stored in a tank 10. Lagreid et al. teaches the use of a warming burner (see claim 1 of Lagreid et al., col. 5, line 26) for providing heat to a griddle.

Thus it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to provide the device of claims 21-32 of application 10/691,493 with a warming burner as taught by Lagreid et al. for the purpose of providing heat to a griddle.

Allowable Subject Matter

Claims 16 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chern (US 6189557), Guarnaschelli et al. (US 4193755), Sekiya et al. (JP 57-41509), Nishino et al. (JP 54-106935), and Tung-Chu (GB 1398953) disclose various vaporizing/combustion arrangements.

Contact Information

Any inquiry concerning this or earlier communications from the examiner should be directed to Sara Clarke whose phone number is 571-272-4873. The examiner normally can be reached Mon-Fri, 8:30-1:00.

If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Ira Lazarus, can be reached at 571-272-4877. The fax number for the organization where this application is assigned is 703-872-9306.

Status information for an application is available from the Patent Application Information Retrieval (PAIR) system. Status information for published applications is available from Private or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR, see <http://pair-direct.uspto.gov>. For questions on access to Private PAIR, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sara Clarke

Primary Examiner
Art Unit 3749

March 21, 2005